

NOTES ON THE BIRDS OF DOUGLAS COUNTY, KANSAS

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The aim of this paper is to place on record our observations that, excepting those obtainable from specimens collected, might otherwise not be available. The paper deals chiefly with occurrence and is wholly limited to birds collected and observed by us in Douglas County, Kansas, mainly, between September, 1919, and May, 1923. A few observations made after this time are included but all such are indicated by date. A total of 258 field-trips was made. These cover 231 separate days. Records were also kept of birds seen about the authors' homes in Lawrence. Nearly all of the northern part of the country was worked. Most work was done in spring and fall and least in summer. Of the 201 identifications 164 are based on specimens collected. All these specimens, numbering more than one thousand, are now in the collection of the University of Kansas Museum of Natural History at Lawrence.

The city of Lawrence is located in the north-central part of Douglas County on the Kansas River. Most of the work here reported on was done south, east and west of, and within ten miles of, Lawrence. The Kansas River, whose valley is three to six miles wide, forms most of the northern boundary of the county and is joined, eight miles south of Lawrence, by the Wakarusa River. The latter is a smaller stream that passes three miles south of Lawrence and runs east by north. Its valley widens out near the mouth and thus, there is much flat bottom land south and east of Lawrence as well as along the Kansas River. Some temporary marshes exist in the Wakarusa River Valley in rainy seasons. Probably less than half the upland, both west of Lawrence and north of the Kansas River, is in cultivation. Much of the remainder is pasture but several patches of the original prairie remain. This part of the area is rolling and cut by numerous ravines and small creeks. South of the Wakarusa River there is a range of hills, about 250 feet high, with about one-fourth their surface covered by brushy timber. Cattle are pastured on much of this hill land. Although the above mentioned divisions of the area intergrade, their boundaries are fairly well marked.

The direct course taken by the Kansas River to its connection, thirty miles away, with the Missouri River, helps to bring a large bird population to this vicinity. Many birds that occur in the area in winter are found regularly only along the Kansas River. Originally, game birds were abundant along this stream but hunting has greatly reduced their numbers. The numerous sand bars of the river, although

not as much frequented by shore birds as are the mud flats, nearly always have some birds in the proper seasons. The vertical cut-banks are used as nesting places by kingfishers and large colonies of swallows.

The Wakarusa River and small creeks also have steep banks but are so small that, aside from a few ducks, herons, and Spotted Sandpipers, most of the water birds found on them are stragglers.

Many water birds occur at Lake View which is five miles northwest of Lawrence. Ducks and sandpipers are especially common there. This ox-bow lake, formed by a change in the course of the Kansas River, is about one and one-half miles long and is of the same width as the river, that is, 75 to 200 yards. Its depth is less than six feet and the shore is flat and usually covered with mud. One end of the lake has so grown up with vegetation that it provides a good shelter for marsh loving birds. Due to the heavy shooting that takes place almost daily on the lake in fall, fewer birds stop there than in spring.

The marshy ground on the Haskell Institute farm, just south of Lawrence, is, in rainy seasons, a good feeding ground for all kinds of marsh frequenting birds. Water stands in the drainage ditches and on the low ground that is not properly drained. Here, a heavy growth of native grass furnishes hiding places for such birds as ducks, rails, snipe, bitterns, marsh wrens, and several species of sparrows. These, in turn, attract many hawks and owls.

The river valleys in Douglas County are not heavily timbered. Along the Kansas River there is a narrow border of willows and cottonwoods and a few patches of other trees. This timber usually has a thick growth of underbrush and weeds which, nearly every year, produces a large crop of weed seeds that attract wintering sparrows. In this timber the waves of transients, which follow the streams, can, of course, more easily be seen in spring, when the vegetation is not dense, than in fall.

The hilltops as well as most of the valleys have been cleared for farming. Thus only the hillsides are covered with timber. This is of the red oak-hickory type. Most of the hillsides have limestone outcrops and, as a rule, the vegetation is not so thick there as it is near the streams. The hillsides are more quiet and less frequently disturbed by hunters and other persons than are the valleys.

The representative pasture near Lawrence, with its blue grass, its weed patches, its thickets of sumac and coral-berry, and its scattered group of trees, furnishes a variety of habitat. The pastures often

adjoin or include small patches of hillside timber. Nearly every pasture in the territory has a wooded ravine running through it. During the winter, loose flocks, containing many species of birds, travel up and down these ravines while feeding. However, these pastures furnish few desirable nesting sites and thus are chiefly used as feeding grounds and for protection in winter.

There are several abandoned roads near Lawrence. These are lined with rows of osage-orange which has made tangles of brush and these have practically been turned over to the birds. Several roads that are in use, have osage-orange and other brush along their sides and also furnish food, protection, and nesting sites for several species of birds.

Cultivation of the land in this vicinity has, in itself, affected a few species of birds and the draining of the low marshy ground along the Wakarusa has driven out nearly all the water birds that formerly nested there. Now, only a few of these species may be found, as transients, in favorable seasons. The planting of trees in parks, cemeteries, nurseries, around farm buildings, and along roads has helped to increase the number of bird individuals and probably the number of species. An * before the name of a species indicates that specimens were taken.

ANNOTATED LIST

[The following list contains 201 named forms.—Ed.]

*PIED-BILLED GREBE. *Podilymbus podiceps*. Found commonly between March 28 and June 2 and between October 2 and 30. Seen on the Kansas River, at Lake View, and on small ponds.

RING-BILLED GULL. *Larus delawarensis*. Flock of about 20 seen on April 30, 1920.

FRANKLIN'S GULL. *Larus franklini*. Small flocks seen May 2, 1920, and November 5, 1919.

*BLACK TERN. *Chlidonias nigra surinamensis*. Seen feeding over fields and on the lake at Lake View from May 5 to June 2.

DOUBLE-CRESTED CORMORANT. *Phalacrocorax auritus auritus*. Single individuals seen at Lake View on April 17, May 1, 8, and 15, and October 2, 1920.

MERGANSER. *Mergus americanus*. Found on Kansas River, January 11, 1920, and on Wakarusa River, May 9, 1921.

HOODED MERGANSER. *Lophodytes cucullatus*. Seen at Lake View, May 1, 1920, and on Wakarusa River, May 5, 1921.

*MALLARD. *Anas platyrhynchos*. Transients noted from February 15 to May 6 and from October 30 to November 11.

GADWALL. *Chaulelasmus streperus*. One bird identified in bag of hunter on Haskell farm. March 15, 1921.

BALDPATE. *Mareca americana*. Found on March 28 and April 12, 1921, south of Lawrence and from April 10 to 24, 1920, at Lake View.

*GREEN-WINGED TEAL. *Nettion carolinense*. Seen from March 12 to April 28 and from September 8 to November 11.

*BLUE-WINGED TEAL. *Querquedula discors*. Common; seen from March 9 to May 21.

SHOVELLER. *Spatula clypeata*. Transients found from March 28 to May 15.

*AMERICAN PINTAIL. *Dafila acuta tzitzioha*. Found between January 30 and May 5 and in the fall.

CANVAS-BACK. *Marila valisineria*. At Lake View on April 24 and May 1, 1920, and March 28, 1921.

LESSER SCAUP DUCK. *Marila affinis*. Found from March 25 (1921) to May 8 (1920), at Lake View and noted every spring on Kansas River near Lawrence.

CANADA GOOSE. *Branta canadensis canadensis*. Flocks seen and heard as they flew over Lawrence in spring and fall migrations.

*BITTERN. *Botaurus lentiginosus*. Found in the wet Haskell meadows between April 4 and May 12, 1922, and between October 3 and 28. One, of two seen, collected November 26, 1921.

*LEAST BITTERN. *Ixobrychus exilis*. One flushed at edge of lake at Lake View on June 2, 1920.

GREAT BLUE HERON. *Ardea herodias herodias*. Frequently seen on Kansas River in summer.

*GREEN HERON. *Butorides virescens virescens*. Arrived in 1921 on April 11. Latest fall record, October 30, 1920. Common summer re ident.

*BLACK-CROWNED NIGHT HERON. *Nycticorax nycticorax naevius*. Found on March 27 and April 18, 1920; April 23 and 27, and May 2, 5 and 15, and September 13, 1921; and April 7, 17 and 29, and May 3 and 4, 1922.

*YELLOW-CROWNED NIGHT HERON. *Nyctanassa violacea*. A female shot in small grove of trees along Kansas River, two miles east of Lawrence, May 4, 1921. One year later, May 4, 1922, a male was collected in the same grove.

*KING RAIL. *Rallus elegans*. Frequently seen in wet Haskett meadows south of Lawrence between April 7 and June 4 and between Octo-

ber 17 and November 25. Egg, ready to be laid, taken from bird May 4, 1921.

*VIRGINIA RAIL. *Rallus virginianus*. Collected in sloughs south of Lawrence on May 4 and 14, 1921.

*SORA. *Porzana carolina*. Found in wet meadows south of Lawrence between April 22 and May 21. Fall date, November 9, 1920.

*COOT. *Fulica americana*. Found on rivers, creeks and at Lake View.

WILSON'S PHALAROPE. *Steganopus tricolor*. Found between April 24 and May 14 at Lake View.

WOODCOCK. *Rubicola minor*. One bird seen on Haskell farm in swampy timber along Wakarusa River, October 3, 1922.

*WILSON'S SNIPE. *Gallinago delicata*. Common in wet places between March 16 and May 12, and between October 5 and November 6. Late dates, November 25 and 26, 1921.

*LONG-BILLED DOWITCHER. *Limnodromus griseus scolopaccus*. Three taken from flock of four April 5 on Haskell meadows and another from small flock at pond one mile west of Haskell farm on April 28, 1922.

*PECTORAL SANDPIPER. *Pisobia maculata*. Common transient in wet meadows south of Lawrence, at Lake View, and along Kansas River.

WHITE-RUMPED SANDPIPER. *Pisobia fuscicollis*. Seen at Lake View on April 10 and 17 and May 8, 1920.

*LEAST SANDPIPER. *Pisobia minutilla*. Common transient. Found in flocks at Lake View, in Haskell meadows, and along Kansas River.

*SEMIPALMATED SANDPIPER. *Ereunetes pusillus*. Common transient.

*HUDSONIAN GODWIT. *Limosa haemastica*. One collected from group of four at small pool of water three miles south of Lawrence on May 4, 1921.

*GREATER YELLOW-LEGS. *Totanus melanoleucus*. Six records between April 6 and May 14.

*YELLOW-LEGS. *Totanus flavipes*. Common transient at Lake View and in wet meadows south of Lawrence.

*SOLITARY SANDPIPER. *Tringa solitaria solitaria*. Found between April 12 and May 19. Fall date, September 13, 1921.

UPLAND PLOVER. *Bartramia longicauda*. Record: 1920, on April 25 and 30 and on June 4; 1921, on April 22, 26, and 29; and 1922, on April 6, 25, 28 and 29.

*SPOTTED SANDPIPER. *Actitis macularia*. Seen from April 24 to October 10.

*LONG-BILLED CURLEW. *Numenius americanus*. One collected on Haskell meadows. April 4, 1922.

GOLDEN PLOVER. *Pluvialis dominica dominica*. Flock of seven birds seen. April 6, 1922, on Haskell meadows.

*KILLDEER. *Oxyechus vociferus*. Recorded between March 4 and December 4.

*SEMIPALMATED PLOVER. *Charadrius semipalmatus*. Found along Kansas River and at Lake View between April 24 and May 15. Only fall record, October 30, 1920.

*BOB-WHITE. *Colinus virginianus virginianus*. Common resident.

PRAIRIE CHICKEN. *Tympanuchus americanus americanus*. One seen flying over a field two miles south of Lawrence on January 8, 1921.

*MOURNING DOVE. *Zenaidura macroura carolinensis*. Common in summer and frequently seen in winter. Nest containing three eggs found on May 23, 1920.

TURKEY VULTURE. *Cathartes aura septentrionalis*. Recorded between March 9 and October 23.

*MARSH HAWK. *Circus hudsonius*. Found between August 28 and May 12. Most common in October, November and March.

*SHARP-SHINNED HAWK. *Accipiter velox*. Recorded on April 9 and 17, 1921, and May 3, 1920.

*COOPER'S HAWK. *Accipiter cooperi*. Found frequently throughout the year.

*RED-TAILED HAWK. *Buteo borealis borealis*. Common throughout the year. Nests in timber on hills and along streams.

*WESTERN RED-TAIL. *Buteo borealis calurus*. Common in winter.

HARLAN'S HAWK. *Buteo borealis harlani*. Seen in winter.

SWAINSON'S HAWK. *Buteo swainsoni*. April 12, 1922, only record.

*ROUGH-LEGGED HAWK. *Archibuteo lagopus sancti-johannis*. Recorded between November 12 and April 21.

*SPARROW HAWK. *Cerchneis sparveria sparveria*. Found throughout the year. One pair nested, each year, in a cornice of a building on the University of Kansas campus. Several other pairs nested in the city of Lawrence.

OSPREY. *Pandion haliaetus carolinensis*. One bird at Lake View, September 30, 1922.

*BARN OWL. *Tyto alba pratincola*. Recorded on March 9 and 30 and May 14, 1921, April 21, 1922, and September 20, 1923.

*LONG-EARED OWL. *Asio wilsonianus*. Found on April 14, 17 and 27, 1921.

*SHORT-EARED OWL. *Asio flammeus*. Common each winter in tall grass on Haskell meadows and noted on other meadows not cut for hay.

BARRED OWL. *Strix varia varia*. Permanent resident found in heavy timber along Washington Creek seven miles southwest of Lawrence.

*SCREECH OWL. *Otus asio asio*. Common resident.

GREAT HORNED OWL. *Bubo virginianus virginianus*. Found throughout the year in timber along streams.

*YELLOW-BILLED CUCKOO. *Coccyzus americanus americanus*. Common summer resident. Recorded between May 12 and September 21.

BELTED KINGFISHER. *Ceryle alcyon alcyon*. Found along the streams throughout the year but less commonly in winter.

*HAIRY WOODPECKER. *Dryobates villosus villosus*. Found in nearly all timber in county.

*DOWNY WOODPECKER. *Dryobates pubescens medianus*. Common resident.

*YELLOW-BELLIED SAPSUCKER. *Sphyrapicus varius varius*. Records are March 26 and April 12, 1922; January 15 and March 6, 1923.

*RED-HEADED WOODPECKER. *Melanerpes erythrocephalus*. Common in summer and locally common in winters of 1922 and 1923.

*RED-BELLIED WOODPECKER. *Centurus carolinus*. Found throughout the year.

*NORTHERN FLICKER. *Colaptes auratus luteus*. Found at all seasons.

RED-SHAFTED FLICKER. *Colaptes cafer collaris*. One record. December 2, 1923.

*WHIP-POOR-WILL. *Antrostomus vociferus vociferus*. Found in summer, in timber on hills and along streams. In 1922, first seen on April 25.

*NIGHTHAWK. *Chordeiles virginianus virginianus*. Few seen except in migration seasons when frequent.

*CHIMNEY SWIFT. *Chaetura pelagica*. Common in summer in neighborhood of buildings. Dates of arrival are: 1920, April 16; 1921, April 15; 1922, April 8; and 1923, April 16. Latest fall record. October 11, 1919.

RUBY-THROATED HUMMINGBIRD. *Archilochus colubris*. Common in summer.

*KINGBIRD. *Tyrannus tyrannus*. Common in summer, near houses and timber. Earliest spring record, April 12, 1922. Latest fall record, August 29, 1920.

*ARKANSAS KINGBIRD. *Tyrannus verticalis*. Seen along Kansas River northwest of Lawrence on May 15, 1920. A male shot three miles east of Lawrence along same river, April 29, 1922. Another seen at this place on May 7, 1922.

*CRESTED FLYCATCHER. *Myiarchus crinitus*. April 21, 1920, is earliest spring record for this common summer resident. Latest fall record, September 21, 1921.

*PHOEBE. *Sayornis phoebe*. Common in summer near culverts, bridges, and buildings as well as near cuts and rock ledges along streams. March 9, 1921, is earliest spring record. October 9, 1920, is latest fall record.

*OLIVE-SIDED FLYCATCHER. *Nuttallornis borealis*. Female shot in timber east of Lawrence, September 4, 1921. Another seen in timber near Lake View in first week of May, 1924.

*WOOD PEWEE. *Myiochanes virens*. Common in summer.

*ACADIAN FLYCATCHER. *Empidonax virescens*. May 6, 1920, earliest record.

*ALDER FLYCATCHER. *Empidonax traillii alnorum*. Collected May 6 and 8, 1921.

*LEAST FLYCATCHER. *Empidonax minimus*. Collected May 7 and September 21, 1921.

*PRAIRIE HORNED LARK. *Otocoris alpestris praticola*. Common in fields and often seen in roads.

*BLUE JAY. *Cyanocitta cristata cristata*. Found wherever there are trees but not common in winter.

*CROW. *Corvus brachyrhynchos brachyrhynchos*. Common resident.

*BOBOLINK. *Dolichonyx oryzivorus*. Seen in pastures south of Lawrence on May 9 and 20, 1920; May 8 and 14, 1921; and May 13, 1923.

*COWBIRD. *Molothrus ater ater*. No winter records between November 12 and March 5. Common during remainder of year.

YELLOW-HEADED BLACKBIRD. *Xanthocephalus xanthocephalus*. Flocks seen on April 24 and 25, 1920, and on April 25, 1922.

*RED-WINGED BLACKBIRD. *Agelaius phoeniceus phoeniceus*. Found in summer.

*THICK-BILLED REDWING. *Agelaius phoeniceus fortis*. Specimens collected but seasonal distribution not worked out.

*MEADOWLARK. *Sturnella magna magna*. Found at all seasons but more commonly in summer.

*WESTERN MEADOWLARK. *Sturnella neglecta*. Records are: November 25, 1920 (collected); April 17 and 25, 1921, and November 12, 1921; and April 29 and 30 and May 7, 1922. A few pairs nested in pastures near Lawrence.

*ORCHARD ORIOLE. *Icterus spurius*. Common summer resident. None found later than August 29 (1920).

*BALTIMORE ORIOLE. *Icterus galbula*. Earliest record, April 24, 1920. Latest fall record, September 29, 1920.

*RUSTY BLACKBIRD. *Euphagus carolinus*. All records between November 6 and April 18. Roosted, in fall, in wet weadow land south of Lawrence.

*BRONZED GRACKLE. *Quiscalus quiscula aeneus*. Earliest spring record, March 9, 1921. Latest record, December 27, 1920. Common in summer, abundant in spring and fall.

PURPLE FINCH. *Carpodacus purpureus purpureus*. Winter records, January 11, 1920, and November 12 and 20, 1921.

CROSSBILL. *Loxia curvirostra minor*. Flocks recorded between October 3 (1924) and April 6 (1920). In Lawrence, usually found feeding on seeds of pine trees.

*GOLDFINCH. *Astragalinus tristis tristis*. Common resident.

PINE SISKIN. *Spinus pinus*. Common from January 10 to May 14 in spring of 1920.

*ENGLISH SPARROW. *Passer domesticus*. Most abundant in vicinity of farm buildings.

*LAPLAND LONGSPUR. *Calcarius lapponicus lapponicus*. Large flocks seen in fields south of Lawrence on January 11 and November 18 and 25, 1920.

*VESPER SPARROW. *Pooecetes gramineus gramineus*. Found as a transient. Seen most frequently at edges of fields and along roads. In 1920, 1921, and 1922, first recorded on March 27, 28, and 30, respectively. Latest spring records, April 23, 1920 and 1921. Fall records between October 4 (1919) and November 11 (1921).

*SAVANNAH SPARROW. *Passerculus sandwichensis savanna*.

*WESTERN SAVANNAH SPARROW. *Passerculus sandwichensis alaudinus*. Both forms taken during migrations. Spring records, between March 10 and May 15. October 25, 1920, is latest fall record. Found in grassy fields.

GRASSHOPPER SPARROW. *Ammodramus savannarum australis*. Recorded on May 1 and October 2, 1920.

*LECONTE'S SPARROW. *Passerherbulus lecontei*. Common in grassy meadows in spring and fall.

*LARK SPARROW. *Chondestes grammacus grammacus*. First recorded in 1920 on April 16; in 1921 on April 19; and in 1922 on April 15. Present throughout summer.

*HARRIS'S SPARROW. *Zonotrichia querula*. Earliest fall record for this winter resident is October 9, 1920. Late spring records: May 9, 1920; May 14, 1921; and May 13, 1922.

*WHITE-CROWNED SPARROW. *Zonotrichia leucophrys leucophrys*. Spring records: April 30, 1920; May 12, 1921; and March 22 and May 6, 1922. Fall records are October 2 and December 11, 1920.

*GAMBEL'S SPARROW. *Zonotrichia leucophrys gambeli*. Eight spring records between March 30 (1922) and May 8 (1921). Fall records: October 16, 17, and 23, 1920; and October 22 and November 25, 1921.

*WHITE-THROATED SPARROW. *Zonotrichia albicollis*. Spring records between March 30 (1922) and May 20 (1921). Found in fall between October 3 (1921) and December 11 (1920).

*TREE SPARROW. *Spizella monticola monticola*.

*WESTERN TREE SPARROW. *Spizella monticola ochracea*. Both forms collected. Present in winter from October 25 (1920) until April 18 (1920).

*CHIPPING SPARROW. *Spizella passerina passerina*. Earliest arrival, March 6, 1924. Latest fall record, October 3, 1920.

*CLAY-COLORED SPARROW. *Spizella pallida*. Collected in edge of patch of timber, two miles east of Lawrence on May 10, 1921 and April 3, 1922. Records at similar place along Wakarusa River, on Haskell farm, May 4 and 9, 1922.

*FIELD SPARROW. *Spizella pusilla pusilla*.

*WESTERN FIELD SPARROW. *Spizella pusilla arenacea*. Most of those collected apparently intermediate between these two forms. Recorded between March 4 and October 30.

*SLATE-COLORED JUNCO. *Junco hyemalis hyemalis*. Earliest arrival of this common winter resident, September 23, 1920. Late spring records: April 25, 1921 and April 30, 1922.

*SONG SPARROW. *Melospiza melodia melodia*.

*DAKOTA SONG SPARROW. *Melospiza melodia juddi*. Species found from September 26 (1920) until May 9 (1921).

*LINCOLN'S SPARROW. *Melospiza lincolni lincolni*. Spring records between April 3 (1922) and May 15 (1921).

*SWAMP SPARROW. *Melospiza georgiana*. Recorded between March 13 (1920) and May 10 (1921) and between October 21 and December 2 (1920).

*FOX SPARROW. *Passerella iliaca iliaca*. Common winter resident. Earliest arrival, October 16, 1921. Latest record, April 19, 1921.

*TOWHEE. *Pipilo erythrophthalmus erythrophthalmus*. Common in summer and frequent in winter.

*CARDINAL. *Cardinalis cardinalis cardinalis*. Common resident.

*ROSE-BREASTED GROSBEAK. *Hedymeles ludovicianus*. Found between April 25 (1922) and September 13 (1921). Often seen in shade trees in Lawrence.

*INDIGO BUNTING. *Passerina cyanea*. Common summer resident between April 30 (1920) and September 13 (1921).

*DICKCISSEL. *Spiza americana*. April 25, 1922, earliest record for this common summer resident.

*SCARLET TANAGER. *Piranga erythromelas*. Found in oak timber on hills. May 8, 1920, earliest spring record.

*SUMMER TANAGER. *Piranga rubra rubra*. Found in same places as Scarlet Tanager. Earliest record, April 29, 1922.

PURPLE MARTIN. *Progne subis subis*. Found commonly between March 18 (1922) and September 3 (1919).

*CLIFF SWALLOW. *Petrochelidon lunifrons lunifrons*. Found in spring from April 29 to May 19. August 29, 1920, only fall record.

*BARN SWALLOW. *Hirundo erythrogastra*. Earliest records: April 23, 1920; April 22, 1921; and April 25, 1922. Late fall records. October 4, 1919, and September 21, 1921.

*TREE SWALLOW. *Iridoprocne bicolor*. Present as transient between April 24 (1920) and May 8 (1921).

*BANK SWALLOW. *Riparia riparia*. Nested in vertical banks along Kansas River. Earliest date of arrival, April 17, 1920.

*ROUGH-WINGED SWALLOW. *Stelgidopteryx serripennis*. Found with Bank Swallow. Earliest record, April 22, 1921.

*CEDAR WAXWING. *Bombycilla cedrorum*. Fifteen records between January 1 (1920) and May 6 (1921).

*NORTHERN SHRIKE. *Lanius borealis*. Seen on December 19, 1919, and one shot along a road, three miles south of Lawrence, on November 11, 1920.

*WHITE-RUMPED SHRIKE. *Lanius ludovicianus excubitorides*. A male, shot November 25, 1922, was identified by Dr. A. Wetmore as belonging to this subspecies.

*MIGRANT SHRIKE. *Lanius ludovicianus migrans*. Common, in summer, along roads and in thickets in pastures. Winter records: December 27, 1920, and March 11 and 12, 1921.

*RED-EYED VIREO. *Vireosylva olivacea*. Common summer resident. Records between May 3 (1921) and September 17 (1921).

*WARBLING VIREO. *Vireosylva gilva gilva*. Found between April 23 (1922) and September 21 (1923).

*YELLOW-THROATED VIREO. *Lanivireo flavifrons*. Recorded May 8, 1920, and April 28 and May 14, 1921.

*BLUE-HEADED VIREO. *Lanivireo solitarius solitarius*. Recorded, May 8, 1920; May 6, 10 and 15, 1921; September 13 and 24, and October 22, 1921; and September 20, 1923.

*WHITE-EYED VIREO. *Vireo griseus griseus*. Found in summer at edge of timber on hills. Earliest arrival, April 15, 1922.

*BELL'S VIREO. *Vireo belli belli*. First records of this common summer resident, May 3, 1920, and May 8, 1922. Late records, September 26, 1920, and September 13, 1921.

*BLACK AND WHITE WARBLER. *Mniotilta varia*. Found only as transient. April 29, 1922, earliest record. None seen after May 18 (1920). Latest record, September 23, 1921.

*GOLDEN-WINGED WARBLER. *Vermivora chrysoptera*. One taken, May 2, 1921, three miles south of Lawrence on Wakarusa River. Believed to be first specimen collected in state.

*NASHVILLE WARBLER. *Vermivora ruficapilla ruficapilla*. Frequent transient. Recorded between May 7 (1922) and May 14 (1921). Fall records: September 24, 1921, and September 20, 1923.

*ORANGE-CROWNED WARBLER. *Vermivora celata celata*. Common in spring. Recorded between April 21 (1922) and May 20 (1921).

*TENNESSEE WARBLER. *Vermivora peregrina*. Common transient. Recorded between April 25 (1922) and May 23 (1920). September 17, a fall record.

*NORTHERN PARULA WARBLER. *Compsothlypis americana pusilla*. Earliest record, April 13, 1921. Young birds, just out of nest, collected in timber twelve miles south of Lawrence on July 9, 1922.

CAPE MAY WARBLER. *Dendroica tigrina*. An adult male seen in timber along Kansas River northwest of Lawrence on May 15, 1920.

*YELLOW WARBLER. *Dendroica aestiva aestiva*. Common summer resident. Earliest record, April 24, 1920.

*MYRTLE WARBLER. *Dendroica coronata*. Found from April 17 (1920 and 1921) until May 17 (1920) and from October 3 (1920) until November 12 (1921).

MAGNOLIA WARBLER. *Dendroica magnolia*. Recorded on May 15, 16, and 17, 1920, and on May 7, 1921.

CHESTNUT-SIDED WARBLER. *Dendroica pensylvanica*. Seen feeding in bushes near the ground in a small patch of timber along Kansas River, three miles east of Lawrence on May 17 and 19, 1920.

*BLACK-POLL WARBLER. *Dendroica striata*. Found commonly from May 9 until May 23, 1920, and from May 12 to 20, 1921, and on May 10, 1922.

BLACKBURNIAN WARBLER. *Dendroica fusca*. Small group seen in trees in west part of Lawrence on September 9, 1920.

*BLACK-THROATED GREEN WARBLER. *Dendroica virens*. Collected in timber along Wakarusa River on May 7 and 8, 1921, and on May 7, 1922.

*PALM WARBLER. *Dendroica palmarum palmarum*. Seen in edge of timber near Lake View, May 8, 1920. Collected in narrow fringe of willows, skirting Kansas River, east of Lawrence on May 6, 1921; April 29 and 30, 1922; and May 3 and 5, 1922.

*OVEN-BIRD. *Seiurus aurocapillus*. May 6, 1922, earliest record. Records for September 13, 17, and 21, 1921.

*WATER-THRUSH. *Seiurus noveboracensis noveboracensis*. A female, collected May 21, 1921, was identified by Dr. A. Wetmore as belonging to this form. This is believed to be the first record for the taking of this subspecies within the state of Kansas.

*GRINNELL'S WATER-THRUSH. *Seiurus noveboracensis notabilis*. In all, ten spring records in 1920-21-22. Earliest, April 30, 1920, and latest May 22, 1920.

*KENTUCKY WARBLER. *Oporornis formosus*. Found in timber on hills and along streams from May 4, 1921, until September 13, 1921. Young birds, just leaving the nest, collected on July 9, 1922, on low timbered ground twelve miles south of Lawrence.

*MOURNING WARBLER. *Oporornis philadelphia*. Found in weeds along streams on May 17, 19, and 23, 1920.

*MARYLAND YELLOW-THROAT. *Geothlypis trichas trichas*. Common summer resident. April 21, 1922, earliest record and September 13, 1922, latest.

*YELLOW-BREASTED CHAT. *Icteria virens virens*. Found, earliest, on April 29, 1920. Latest record, August 29, 1920. Common all summer.

*WILSON'S WARBLER. *Wilsonia pusilla pusilla*. Spring records between May 2 (1921) and May 17 (1920). Only fall records, September 9, 1920, August 23, 25, and September 17, 1921.

*PILEOLATED WARBLER. *Wilsonia pusilla pileolata*. A female collected on May 2, 1921, was identified by the U. S. Bureau of Biological Survey as a Pileolated Warbler.

*REDSTART. *Setophaga ruticilla*. Found in timber on hills and along streams all summer. Early and late records are April 30, 1920, and September 17, 1921.

*PIBIT. *Anthus rubescens*. Especially common during an outbreak of the green bug in fields near Lawrence in the spring of 1921. Found from March 12 until May 19 of that year and usually seen in large flocks.

*MOCKINGBIRD. *Mimus polyglottos polyglottos*. A few found in summer, along roads near Lawrence, from April 15 (1921) until September 13 (1921). One seen in a patch of timber, four miles south of Lawrence, on December 22, 1919.

*CATBIRD. *Dumetella carolinensis*. Common summer resident. Recorded between April 25 (1922) and October 4 (1919).

*BROWN THRASHER. *Toxostoma rufum*. Common summer resident. Earliest record, April 6, 1922. Latest record, October 4, 1919. One seen on October 2, 1920.

*CAROLINA WREN. *Thryothorus ludovicianus ludovicianus*. Common resident.

*WESTERN HOUSE WREN. *Troglodytes aedon parkmani*. Common in summer. Dates of arrival for 1920-21-22-23 are: April 15, 13, 10, and 9, respectively. October 9, 1921, latest fall record.

*WINTER WREN. *Nannus hiemalis hiemalis*. Found on January 9, 1923; March 30, 1921; and on April 18, 1920.

*SHORT-BILLED MARSH WREN. *Cistothorus stellaris*. Collected April 29, 1921. A group of six found in brush pile along ditch, May 10, 1921. These birds were singing. Another shot, in tall grass in meadow, two miles south of Lawrence, on October 25, 1920.

*PRAIRIE MARSH WREN. *Telmatodytes palustris iliacus*. Found on April 29, and May 7, 8, 14, and 19, 1921, and May 8, 1920. Found at Lake View and on wet ground south of Lawrence.

*BROWN CREEPER. *Certhia familiaris americana*. Common winter resident between October 16 (1921) and April 18 (1922).

*WHITE-BREASTED NUTHATCH. *Sitta carolinensis carolinensis*. Found frequently throughout the year.

*RED-BREASTED NUTHATCH. *Sitta canadensis*. Recorded on March 27 and May 6, 1920, and March 3, 1924. On the latter date one was

caught with bare hands while it rested in an old Cardinal's nest of the previous season.

*TUFTED TITMOUSE. *Baeolophus bicolor*. Common resident.

*CHICKADEE. *Penthestes atricapillus atricapillus*. Resident.

*LONG-TAILED CHICKADEE. *Penthestes atricapillus septentrionalis*. Found in winter.

*GOLDEN-CROWNED KINGLET. *Regulus satrapa satrapa*. Collected on March 8 and December 27, 1921, and locally common in winter between these dates.

*RUBY-CROWNED KINGLET. *Regulus calendula calendula*. Common transient. Recorded between March 27 (1920) and May 14 (1921) and between September 17 (1921) and October 23 (1920).

*BLUE-GRAY GNATCATCHER. *Polioptila caerulea caerulea*. Frequent summer resident between April 2 (1920) and August 29 (1920).

*WOOD THRUSH. *Hylocichla mustelina*. Common summer resident. Recorded between April 26 (1922) and September 17 (1921).

*GRAY-CHEEKED THRUSH. *Hylocichla aliciae aliciae*. Found from May 2 to 19, 1921.

*OLIVE-BACKED THRUSH. *Hylocichla ustulata swainsoni*. Common transient. Present in 1920, from April 29 to May 23, and on September 9.

*HERMIT THRUSH. *Hylocichla guttata pallasii*. Found, near ground in timber, frequently in spring. Dates of occurrence: 1920, April 10 and 18; 1921, March 28 and April 4, 6, 8, 9, 10, 14, and 17; 1922, April 5 and 29.

*ROBIN. *Planesticus migratorius migratorius*. Common summer resident. Infrequent in winter.

*BLUEBIRD. *Sialia sialis sialis*. Common summer resident and found in winter.

BERKELEY, CALIFORNIA, December 20, 1925.